

## ABSTRACT OF THE DISCLOSURE

A device and method for magnetic stimulation of muscles for the diagnosis and relief of a breathing disorder, such as obstructive sleep apnea.

5     Magnetic stimulation is used to stimulate muscles which serve to stabilize the upper airway of an individual whose nocturnal apneic events are related to diminished muscle tone. A sensor monitors a physiologic characteristic of the patient, a coil is energized to stimulate the appropriate muscles associated with the upper airway, a power supply provides power for energizing the coil, and a control system controls  
10    the application of power to the coil based on the output of the sensor. Diagnosis of obstructive sleep apnea is accomplished by measuring the subject's compliance in the presence and absence of the magnetic stimulation of the upper airway muscles. The smaller the difference between these two compliance levels, the more likely that patient suffers from obstructive sleep apnea.